November 4, 2021

VIA FEDERAL EXPRESS and EMAIL

Araceli B. Chavez, Chief
chavez.araceli@epa.gov
RCRA Enforcement Section
Chemical Safety and Land Enforcement Branch
Enforcement and Compliance Assurance Division

Dear Araceli Chavez:

This letter, the included narrative replies, attachments and the enclosed electronic files ("Response") are provided in response to the U.S. Environmental Protection Agencies' ("EPA") October 21, 2021 Resource Conversation and Recovery Act ("RCRA") Section 3007 Request for Information ("Request") directed to TAV Holdings. The Request is undated, but it was received by TAV Holdings ("TAV") on or about October 25, 2021, by email correspondence to myself, Andy Wahl, and Thomas Valerio from Ms. Brooke York of your staff. Clarifications to the Request were received from Ms. York by phone on November 2, 2021.

Over the past several weeks, TAV has been cooperating fully with EPA and the Georgia EPD ("EPD") as those agencies have visited the TAV facility in Atlanta. On August 26, 2021, EPA and EPD conducted a compliance inspection. TAV hosted the inspectors and participated in discussions following the site visit. A report from EPA was later provided, and TAV has already begun responding to the items identified in that report. On October 6, 2021, EPA and EPD conducted an additional compliance evaluation inspection. Following the site visit, Ms. York and I exchanged multiple email correspondence concerning EPA's request for sampling data, and I provided analyses and data to her. On October 20, EPA returned to the facility to gather physical samples. I was the on-site host for TAV for both of these visits. On October 25, TAV received the Request and on that same day exchanged additional emails with Ms. York providing test data. This Response is made in the same spirit of cooperation.

As an initial matter, and in supplement to the narrative responses to the numbered items in the Request, TAV believes it would be helpful to provide an overview of its business operations. In simplest terms, TAV's business model is to advance the cutting edge of processing technology for recycling Automotive Shredder Residue ("ASR") and other post-consumer materials. ASR, for example, is a common recycling stream which, as the name implies, is generated from the

initial processing of cars and major appliances. Fractions of ASR are sometimes combusted for energy recovery, while other fractions contain viable amounts of recoverable materials, including metals such as copper, lead and silver. TAV's core business is to develop proprietary equipment and processes that improve the recovery of metals and other commodities and then sell or license that technology to other companies engaged in the recycling industry.

Just regarding ASR alone, in a typical year approximately 12 million vehicles are shred in the United States, producing approximately 6 billion pounds of shredder residue. This represents a massive resource for even low-concentration materials. For example, even concentrations of only 30 ppm would mean that annual ASR contains nearly 100 tons of that commodity. For materials, such as silver or copper, which are priced by the ounce or pound, this is plainly a desirable resource. Any company focused on such recycling wants to recover as much of the valuable commodities as possible, and TAV is leading the market in providing the most advanced equipment and processes for recycling of post-consumer, post-industrial goods to the maximum extent. TAV supplies such equipment and processes to customers operating recycling businesses in approximately 25 states and 15 countries.

Not surprisingly, the process of recycling metal from ASR and similar material is a very complex science requiring the use of multiple systems. Automating this process presents additional challenges. Depending on the nature of the inbound material the number and sequence of the processes required for maximized recovery of the valuable commodities varies; however, the main steps include physical size reduction of the material, sorting the material based on specific gravity, utilization of eddy current technology, induction imaging of material, size segregation, crushing, wire bundling, density sortation, and other physical separating mechanisms of the heterogeneous material that is received.

In order to continue improving the equipment and systems it markets (that is, in order to continue identifying and scaling the combination of processes and techniques for extracting finer and finer amounts of valuable commodities from post-consumer goods), TAV is continually involved in research at its facility. As a result, research into equipment adjustments and system modifications are integral to TAV's operations. This means that TAV will regularly accumulate ASR, even ASR which has been initially processed, in order to be re-processed with an updated technology or methodology in the effort to identify techniques for further extracting usable commodities. These improved systems can then be marketed to recyclers. In support of this research, TAV operates a laboratory for evaluating metal products. Samples are collected and analyzed for metal concentrations. This is required for marketing the metal concentrates, ensuring that the values received are mutually agreeable between the seller and buyer.

In support of and in addition to the primary research function, TAV also recycles metals for direct sale into the commodity markets, principally aluminum and copper. This activity involves receiving aluminum rich mixed metal scrap, such as Zorba, and copper rich materials; processing the saleable metal; and isolating various grades of metal. TAV also uses its production scale facilities to provide customer proof of concept demonstrations.

With respect to the formal Request, TAV is attempting to provide complete answers; however, TAV objects to the Request to the extent that it seeks information that is subject to the attorney-client privilege or the attorney work-product doctrine. TAV also contends the Request is

unreasonable in certain respects. In many instances, it is overly broad and unduly burdensome. TAV is not required to maintain a number of the records, data, and/or analysis that are the subject of the Request. Further, insofar as the Request could be read to seek the production of records or data not within TAV's possession, custody, or control and/or the Request seeks to compel TAV to generate any data or manipulate existing data and produce it in some particular form that is different from how TAV typically maintains its business records, TAV objects the Request. TAV reserves the right to supplement this Response if new relevant information becomes available. Finally, to the extent that the Request, in whole or in part, is objectionable on the grounds above, or lies beyond EPA's authority under 3007, given for example, that TAV does not generate, treat or store hazardous wastes, this Response should be considered voluntary.

Please note that the entirety of this Response constitutes information that TAV considers to be confidential. The Response and the documents in the Attachments are all therefore marked "Business Confidential, 40 C.F.R. Part 2," and for all of these documents the electronic files provided are also marked as "Business Confidential, 40 C.F.R. Part 2" and/or have been designated as confidential in the electronic file name. For all of these materials (including the entirety of this Response), TAV asserts a claim of confidentiality pursuant to the procedures set forth in 40 C.F.R. Part 2 and the protections of 5 U.S.C. § 552(b)(4), 18 U.S.C. § 1905, and other applicable law. TAV declares that all confidential information submitted is "Confidential Information" as that term is defined under EPA's Part 2 regulations and other applicable law because disclosure of the information is likely to cause substantial harm to TAV's competitive position, and additionally and alternatively, the information is being submitted voluntarily and is not customarily disclosed to the public. See 40 C.F.R. § 2.208(e). Accordingly, EPA is not authorized to release this information to the public.

Subject to and without waiving the aforementioned objections, or any rights, defenses, claims, or remedies, and with no admission of fact, law, or liability, TAV is providing information requested by EPA because it seeks to continue its cooperation with the Agency and its efforts to understand TAV's operations. To that end, TAV has made a diligent, good faith effort to directly respond to Items 1 through 8 of the Request with this submission. A narrative response to each item, referencing attachment and enclosures as applicable, each of which is accessible for 7 days at the OneDrive link provided here (password: TAVRFI112021!), is as follows:

1. Please list each location in the United States, which is associated with the operations of TAV. For each location describe the processes and operations conducted at the location.

A table with the locations that supply material to or receive product from the TAV facility in Atlanta is provided as Attachment 1. The table also provides a basic description of the process and operations conducted as those locations as TAV understands them. As explained above, TAV has relationships with other facilities who are customers or potential customers of the recycling technology TAV is pursuing. However, these facilities are not associated with the direct operations at the Atlanta facility.

2. Please provide process diagrams, engineering drawings, and as-built drawings for TAV processes.

Attachment 2 includes a process diagram and photos, which are intended to provide a good overview of the TAV facility. The process flow diagram was generated October 21, 2021. Because TAV's business is focused on researching and developing improvements in the efficiency of recycling processes, TAV makes nearly continual adjustments to its equipment and process. As a result, TAV does not typically generate engineering or as-built drawings, which could quickly become obsolete.

3. Please provide all records of disposal for the last five years. For example, if you receive this request on April 1, 2021 please provide all records going back five years to April 1, 2016. These records must include but are not limited to bills of lading, tipping fees, and contracts, and must include dates and weights of disposed material.

TAV has enclosed in Attachment 3 a table with the prior five years of information on disposals from the facility. As agreed to with Ms. Brooke York in a telephone conference on November 2, 2021, TAV is not at this time providing all bills of lading or other such materials related to individual disposal records. Instead, the table provided should contain summaries of the relevant information on dates and destinations. If further information is necessary for your review, we are happy to discuss that request.

4. Please provide a list of all offsite material sources and the weight of all shipments by year from each source. See example below.

Source	Material	All amounts are in tons						
		2015	2016	2017	2018	2019	2020	2021
ABC Recycling	ASR	20,152	15,789	1,562,623	0	121	187	159,596

Although TAV does not maintain a list that matches the example, TAV has voluntarily generated a table with the requested data for the prior five years. This table is in Attachment 4.

5. Please provide all sampling data TAV has collected on material received, stored, or released (spilled, sold or otherwise left the property) from its Facility operating at or near 111 Hollow Tree Lane or 3320 Empire Blvd, in a Microsoft Excel, or Access format.

As we discussed with Ms. York on November 2, 2021, TAV has provided its complete database in Access format. TAV has also provided examples of three different material test types: inbound, outbound, and existing piles. TAV has performed a variety of inspections and tests for materials. During the research and development phase of process technology, multiple test methods, such as visual inspection, visual hand sorts, screen sifting, air flotation, liquid sink-float,

chemical digestion, and others, are employed when reviewing material for determination of the beneficial reuse materials present in the sample.

Sample materials may come to TAV in small bags, five-gallon buckets, super sacks, or truckloads. Inspection determinations of each sample vary and may be limited to visual methods. Inspection determinations will often only occur after process testing. A trial and error methodology is applied to small, or large, samples as well to best determine the process steps to be utilized as well as the number of process steps and order of the steps to best achieve the desired outcome of maximum recyclable materials with the least amount of energy expended. During the research and development phase, depending on the size fraction of the concentrated materials, the use of laboratory test methods will be employed to determine yield recoveries at each process step and for the final outcome of the total process. At the completion of R&D and the process design is complete for a specific objective, laboratory testing is employed for finished material streams to support metallic yield for sales lot data. Tests may be performed for each lot (bag, container, production run) as customers require. Records of all testing in the laboratory are kept in a database by the laboratory technicians.

6. Please provide all hazardous waste determinations made by TAV.

TAV has included all the determinations of non-hazardous status of wastes it has sent off-site that it has located in the time provided. TAV is not aware of any hazardous waste determination related to the facility other than those concerning laboratory materials and volumes. Those determinations are also included for completeness.

7. Please provide all training records demonstrating compliance with the RCRA requirements.

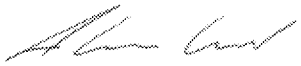
TAV does not treat, store or dispose of hazardous wastes and does not generate hazardous wastes beyond laboratory volumes. Accordingly, TAV is not aware of any RCRA training obligation applicable to the facility. Equivalent training may be provided under other programs. If you are interested in the laboratory training provided, for example, please let us know.

8. Please provide the facility contingency plan developed in accordance with the RCRA regulations.

As stated above, TAV is not aware of a RCRA obligation to develop a contingency plan that is applicable to the facility. TAV does not treat, store or dispose of hazardous waste and does not generate such wastes beyond laboratory volumes. Equivalent planning may be performed for other purposes.

After you have reviewed the provided information, we are happy to schedule an opportunity to discuss it further with you or your staff. We hope this Response helps you understand TAV business and its use of recyclable feedstock.

Sincerely,



Alex Camozzi
Director of Operations

Enclosures (provided in electronic form)

cc: Bob Brewer